



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>A61K 31/70, 38/00, 38/02, 38/18</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 99/18976</b> <b>(43) International Publication Date:</b> 22 April 1999 (22.04.99)
<b>(21) International Application Number:</b> PCT/US98/21349 <b>(22) International Filing Date:</b> 8 October 1998 (08.10.98) <b>(30) Priority Data:</b> 60/062,109 14 October 1997 (14.10.97) US <b>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application</b> US 60/062,109 (CON) Filed on 14 October 1997 (14.10.97) <b>(71) Applicant (for all designated States except US):</b> CAMBRIDGE NEUROSCIENCE, INC. [US/US]; Building 700, One Kendall Square, Cambridge, MA 02139 (US). <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> MCBURNEY, Robert, N. [US/US]; 20 Leslie Road, Newton, MA 02166 (US). HOLT, William [US/US]; 162 A East Central Street, Natick, MA 01760 (US). GWYNNE, David, I. [US/US]; 77 Grover Street, Beverly, MA 01915 (US). MARCHIONNI, Mark [US/US]; 24 Twin Circle Drive, Arlington, MA 02174 (US).	<b>(74) Agents:</b> CONLIN, David, G. et al.; Dike, Bronstein, Roberts & Cushman, LLP, 130 Water Street, Boston, MA 02109 (US).  <b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>	

**(54) Title:** THERAPEUTIC METHODS COMPRISING USE OF A NEUREGULIN**(57) Abstract**

The invention provides methods for treatment and/or prophylaxis of certain neurological-related disorders, particularly treatment or prophylaxis of the effects of stroke, brain or spinal cord injury or ischemia, heart attack, optic nerve and retinal injury and ischemia and other acute-type conditions disclosed herein as well as chronic-type conditions, specifically epilepsy, Alzheimer's disease, Parkinson's disease, Huntington's disease, Amyotrophic Lateral Sclerosis, Down's Syndrome, Korsakoff's disease, cerebral palsy and/or age-dependent dementia. The methods of the invention comprise administration of a neuregulin, or fragment or derivative of a neuregulin, or a nucleic acid encoding a neuregulin or a neuregulin fragment or derivative, to a patient suffering from or susceptible to such conditions.